# Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



AD-33 Beckplate (1-68)

# NATIONAL

GRICULTURE STREET AND COMPRESS OF TRANSPORT OF MARTICIPAL AND COMPRESS OF TRANSPORT OF TRAN

LIBRARY A284.347 82353 G79

UNITED STATES DEPARTMENT OF AGRICULTURE Economic Research Service
Marketing Economics Division
Washington, D. C.

#### INTERPRETATIONS OF PRICE SPREADS FOR EGGS AND POULTRY

By Leo R. Gray, Agricultural Economist
Marketing Economics Division
Economic Research Service

Speech prepared for Ohio Egg and Broiler Day Program Ohio State University, Columbus, Ohio January 29, 1964

Shopping for food generally constitutes the most frequent purchasing activity pursued by mankind. We are all interested in our food bill -- how much it costs us as consumers, and how much of this amount was farm value. The retail cost of our total domestic food bill in the United States was about \$67 billion in 1963. The farm value of this food was \$21.3 billion. 1/ The difference between these amounts is the marketing bill, including payments to marketing agencies for the services they perform. The retail cost for a family market basket of food products was \$1,078 in 1963, the farm value of the market basket was \$394. 2/ The farm-retail spread (\$684) is the difference between the retail cost and the farm value of the market basket. The term "farm-retail spread" also is often called the "marketing margin" or the "marketing charge." The farmer's share, 37 cents per dollar, is the percentage that the farm value is of the retail cost.

Information on marketing margins serves a useful function in: (1) Enabling the consumer to understand where his food dollar goes, and (2) helping the producer to understand the extent of marketing charges represented in the farm-retail spread. These margins in the United States, when compared with those in other countries, show that our marketing system is highly efficient. 3/ In addition, our continuing series of margins data make it easier to spot trends,

<sup>1/</sup> Preliminary estimates. Consumer expenditures for food products, includes food purchased in restaurants. Farm value represents payments to farmers primarily for the production of raw materials used in food products.

<sup>2/</sup> The "family market basket" contains the average quantities of domestic farm-originated food products purchased per family in 1952 for consumption at home by urban wage earner and clerical-worker families. It does not contain imported foods, fishery products, or the cost of meals in eating places, therefore, its retail cost is less than the total cost for all foods bought per family.

<sup>3/</sup> L. R. Gray, D. D. MacPherson, and V. B. Phillips, Prices and Price Spreads for Beef, Eggs, and Fluid Milk in Selected Markets of the United States and Europe. U. S. Dept. Agr., Econ. Res. Serv., ERS-37, December 1961.

places, and times where price spreads may get out of line. When these data are compared with the findings of cost and efficiency studies, opportunities for further cost reductions may show up.

The remainder of this paper will be concerned with some interpretations of concepts and variations of price spreads for eggs and poultry. Most of the emphasis will be on price spreads for eggs. I will discuss my topic in terms of:

(1) The concept of price spreads, (2) the background for price spread studies in the U. S. Department of Agriculture, (3) the kind and sources of information used to determine price spreads, and (4) some price spread variations among cities.

# Concept of Price Spreads

Price spread refers to the difference between the selling price and buying price for a specified unit of a commodity between given market levels of operation. This definition may lead you to ask -- are spreads determined by prices or vice versa?

Price spreads reported by the USDA are based on reported prices. In the short-run they may not reflect actual marketing costs. However, in the long-run the spreads usually approximate the added value for all marketing charges involved, and they include an allowance for profit or loss.

Most marketing firms probably seek to realize certain average margins that are based on additions to buying prices or deductions from selling prices. Ordinarily, these margins are influenced by anticipated average costs and volumes for the overall operations of the firm.

Firms that handle several commodities may give special attention to margins for some individual commodities. This attention might be in the form of various factors including quality premiums and discounts, and other charges that vary with such things as quantity, freight charges, type of pack, and so forth. However, during some short-run periods, competitive pricing policies may override the influence of these cost factors, and usually low margins may appear.

When measured in absolute terms, price spreads tend to remain more stable than do prices, especially for eggs. However, when measured in terms of percentage differences they may be misleading and may vary considerably depending upon the price levels, even though there may be no change in absolute spreads. Percentage measurements can be particularly variable on commodities, such as eggs, that have sizable seasonal fluctuations in volume and prices. A popular percentage measurement of price spreads is the farmer's share of the retail cost for given items. Variations in the farmer's share do not necessarily reflect changes in marketing charges, or in the efficiency of farmers or marketing firms. One reason for the relative stability of the farm-to-retail spread is that factors influencing the size of the spread -- including cost of labor, transportation, equipment, rent, and others -- are less flexible than prices of farm products. In short, farm prices for eggs are essentially residual prices after relatively fixed amounts have been deducted for marketing charges.

Analysis of trends in price spreads involves considerable application of deductive reasoning processes. Why? Because, based on past experiences, we try

# 82353

to explain why prices and price spreads moved as they did, and what factors were largely responsible. Sometimes, price spreads spot abnormal situations, the appropriate reasons for which can be determined only by more intensive analysis of component elements involved in the spread and their structural developments.

#### Development of Margins Research in USDA

Both the role of the middleman and the charges for his services have been questioned for many years. The Bureau of Agricultural Economics began publishing research on price spreads and related data and services in 1935. This was after several years of agricultural depression, when the farmer's share of the retail cost for all food items reached a low annual average of 32 cents in 1932. Public interest in the subject increased. Marketing margins and costs were the subject of several Congressional inquiries and periodic hearings which contributed to the enactment of the Research and Marketing Act of 1946 (Public Law 733, 79th Congress, Second Session). Under the provisions of this Act, it was directed that research should be undertaken at all stages from the original producer through to the ultimate consumer. Among other things the Act sought to bring about more efficient and orderly marketing to the end that marketing methods and facilities may be improved, distribution costs may be reduced, and the price spread between the producer and the consumer may be narrowed. This was to be accomplished so as to benefit both producers and consumers.

Marketing bill and market basket data are available for the years extending back to 1913. These series are compiled for leading commodities from the major food product groups: Eggs and poultry; dairy products; meat products; bakery and cereal products; fruits and vegetables; and fats and oils. In terms of their relative importance in computing the value of the market basket, eggs are given a weighting of 5 percent and frying chickens 3 percent, for a combined total of 8 percent for eggs and poultry in the total market basket in 1963. The current market basket series on eggs extends back to 1919, while that for frying chickens goes back to 1949. However, these market basket series do not yield any information as to the component spreads involved in the farm-retail spread.

Congress directed the Department of Agriculture in 1955 to make a number of special studies on price spreads between farmer and consumer. Since 1956, Congress has earmarked funds for special margins studies. Special margins studies have been conducted to obtain more detailed information on the components of the farm-retail spread for various commodity fields, one of which has been poultry and eggs.

A continuing series of prices for eggs and poultry has been compiled for 4 market levels in several major United States cities since July 1955. This series consists of data compiled for specified periods each month at the retail selling, retail store purchasing, first-city receiver, and at farm price levels. Farm-retail and component price spread data are computed from these price series. Considerable refinements have been made in the prices used to measure price spreads. Some of the refinements include: (1) Allowances for time lags in moving products from farms to consumers, (2) adjustments of values to reflect comparable product qualities at all market levels; and (3) use of weighted averages based on volumes traded at different prices within a range. Results of this

work have been released in various Department publications.

In addition to this continuing study of monthly prices and price spreads, there are special research studies designed to identify the importance of various marketing channels, and the actual and potential costs and efficiencies for performing various marketing functions. Results of these special studies have provided explanations of the makeup of price spreads and the reasons for some of the changes in spreads. These studies have shown that margins vary with alternative marketing channels and between various markets. They provide appropriate background information which enables marketing margins data to be used more widely for drawing inferences as to marketing situations. Advantages and limitations of the margins data also tend to become more readily apparent.

## Bases for Determining Price Spreads for Eggs and Poultry

Price spreads for eggs and poultry are computed monthly, based on reported prices, by members of the Marketing Economics Division, ERS, USDA. Retail prices are collected by the Bureau of Labor Statistics. The other market level prices -- prices to retailers, city receiver prices, and prices at farms -- generally are collected by Federal and State Market News Service offices.

Prices at the farm level are adjusted annually for each city according to information on origin of receipts for the previous year. These receipts data are used to determine weights to apply to farm prices in major commercial production areas supplying each city.

We use prices for specified dates within each month, rather than monthly averages of daily prices. Our pricing dates for levels other than retail selling prices are geared to the pricing dates of the Bureau of Labor Statistics. Rather than concurrent pricing, we lag our pricing dates to allow some time for the physical movement of goods.

Poultry prices at the farm level are converted from live to ready-to-cook equivalent values. Our conversions are based upon standard conversion factors. 4/ We convert poultry prices at the farm level to a ready-to-cook equivalent so that we will be comparing values for the same form of poultry throughout the marketing channel.

# Price Spread Variations Among Cities

#### Trends in Selected Cities

Average prices for eggs and poultry were generally lower in 1963 than they were in 1956, but farm-retail spreads have been relatively stable. However, prices and margins vary considerably between cities.

<sup>4/</sup> For more information on conversion factors for eggs and poultry see: Egg and Poultry Statistics Through Mid-1961. USDA Statistical Bulletin No. 305, March 1962.

### Large Eggs

Farm-to-retail spreads on large eggs of Grade A or better quality in 10 cities averaged 23.7 cents a dozen in 1963, and have ranged from 23.4 to 24.5 cents since 1959 (table 1). In 1963, these spreads ranged from a low of 14.9 cents in Los Angeles to a high of 28.5 cents in New York. In Cleveland, this spread was 26.6 cents in 1963, and was 0.5 cent less than in 1959. Let's take a closer look at some of these spreads in four cities -- Cleveland, Chicago, New York, and Los Angeles.

Farm-to-retail spreads.--The 28.5 cents a dozen farm-to-retail spread for large eggs in New York in 1963 is a weighted average, based on both Nearby and Midwestern eggs (see table 2). Farm-retail spreads on Nearby eggs in New York in 1962 and 1963, were more similar to comparable spreads in Chicago and Cleveland than to those in Los Angeles. Now, let's look at two of the major components of this gross spread -- the retail store spread and the farm-to-retailer spread.

Retail store spread.—Retail store spreads are those taken by retailers. Since 1959, the 10-city average retail store spread has ranged from 9.2 to 10.3 cents a dozen, and averaged 10.2 cents in 1963. New York had the widest retail store spreads of the 4 cities — in fact, the widest of the 10 cities in the series. These spreads were smallest in Chicago of any of the 10 cities. In 1963, retail store spreads were slightly wider in Cleveland than in Los Angeles, although the 1957-63 average was 9.1 cents in Cleveland, and 9.9 cents in Los Angeles — a difference of 0.8 cent. The wide variation in retail store spreads among the cities may be accounted for, largely, by differing retail store pricing policies. Sampling differences may also account for some of the variation. Retail store spreads comprised 43 percent of the gross farm—to—retail spread for the 10 cities in 1963.

Farm-to-retailer spread.--This is the spread between prices paid by retailers and prices received by farmers. Farm-to-retailer spreads in the 10 cities averaged 13.5 cents in 1963, nearly 1 cent narrower than in 1959. Chicago had the largest (19.0 cents) and Los Angeles the smallest (5.9 cents) of these spreads among the 10 cities in 1963. In Cleveland, they averaged 16.8 cents in 1963. The average spread in New York was 13.0 cents in 1963, but it was 10.4 cents for Nearby eggs and 17.8 cents for Midwesterns. This difference in spreads in New York is due to the reporting of different sets of prices at the city receiver price level. Only one price however, is reported at the price to retailer level. We can now break this spread down into two of its major components -- the city receiver-retailer spread, and the farm-city receiver spread.

City receiver-to-retailer spread.--This is the spread between the price to retailers and the f.o.b. delivered city or wholesale selling price (whichever is reported). Essentially, this is the city wholesaler's spread. This spread was biggest in Chicago and smallest in Los Angeles. In 1963, it was 8.4 cents in Cleveland, and 7.7 cents in New York, (see table 3.) In Cleveland and New York, these spreads have narrowed several cents since 1957. Part of this reduction may be due to a partial shifting of functional operations from city wholesalers and large-volume retailer warehouses to their major suppliers.

Farm-to-city receiver spread.--This is the spread between the price at the farm and the city receiver price. This spread would cover the marketing charges for a country dealer who assembled eggs and delivered them to city wholesalers or to large-volume retailers. The increase in this spread for Cleveland and Nearby eggs in New York from 1957 to 1962 may be due to increased marketing charges to cover costs of resource factors and service functions performed by country dealers, although the city receiver prices used are for loose eggs.

It soon becomes apparent that you cannot get all the answers from price spreads. Perhaps we are on safest grounds for purposes of inter-city comparisons, if we stick to the farm-to-retailer spread rather than delve into its components. In fact, city receiver prices are no longer available in some markets because many eggs are delivered directly to retailers.

The reduction in farm-to-retailer price spreads in New York from 1962 to 1963 probably reflects some basic changes in egg marketing. The premiums paid by retailers for Nearby eggs vs. Midwesterns narrowed. Southern eggs have been making substantial inroads in Northeastern markets. This intensified competition induced local handlers to seek ways to improve their efficiency and reduce total costs per dozen eggs. They found the solution largely in the increased use of labor-saving equipment. This also enabled them to increase their level of output for given amounts of capital.

A general effect in the direction of reducing the farm-to-retailer spread has been the improvement in the average quality of eggs. Production and marketing programs for top-quality eggs have expanded in all sections of the country. Better quality eggs enabled handlers to use flash candling and related techniques which reduce plant operating costs, including grade loss.

#### Relative Efficiencies in Four Cities

#### Direct Marketing System

A major reason for the low farm-to-retailer spreads in Los Angeles is that most of the eggs sold were moved in cartons direct from nearby country dealers to retail stores. These country dealers generally collected eggs from producers on regular scheduled routes, and then they graded, packed, and delivered them to retail stores and other outlets. However, city wholesale distributors in New York, Chicago, and Cleveland still received a large proportion of their eggs from country dealers in loose packs. These city wholesalers then graded, packed, and delivered cartoned or loose eggs to retail stores as well as to institutions, restaurants, hotels, etc. These more complex marketing channels tend to widen the farm-to-retailer price spread because of the additional handling costs and expected profits.

One of our special studies indicated that it cost 9.5 cents to assemble, candle, and pack eggs loose in the Midwest and then ship them to Eastern plants, where they were to be rehandled and cartoned. It cost an additional 8.2 cents for city handling charges, including re-candling and cartoning. Thus, total charges for this marketing channel amounted to 18.2 cents a dozen. Costs were 12.2 cents for assembling, candling, and cartoning eggs in Midwestern plants and then shipping them to Eastern plants for distribution. This study pointed out

three principal sources of savings:

- (1) Elimination of one candling operation;
- (2) Reductions in costs of transportation and of egg replacements when undergrades are kept out of shipments; and
- (3) Elimination of the overhead and general expenses of one marketing firm
  -- if sales are made directly to retailers or retail warehouses.

A survey of 18 metropolitan areas of the United States revealed that retail outlets received 23 percent of their eggs already in cartons direct from country dealers during selected months of 1958-61. This proportion has increased since then, because many more large-volume retailers now receive their eggs already cartoned. At the time of the survey, some of these firms received their eggs in loose packs at their own central warehouses and did their own candling and cartoning.

#### Concentration of Handlers Moving Shell Eggs

Most of the eggs moving through these major cities tend to be handled by relatively few firms. Nearly three-fourths (72 percent) of the movement of eggs by commercial handlers in the United States was handled by almost one-third (31 percent) of the firms in 1963. In New York City, for example, out of 433 wholesale distributors, 5 percent of the firms handled 10,000 or more cases of shell eggs in October 1959, and accounted for nearly 55 percent of the volume handled by all wholesale distributors. Similarly, out of 86 retail food store chains, 8 percent handled 10,000 cases or more in the same month and accounted for 75 percent of all shell eggs handled by all retail food chains. In Los Angeles, 14 of 273 firms distributing eggs in wholesale lots to retail stores and other outlets in 1959 accounted for 80 percent of the total commercial movement. We also found that about 80 percent of the eggs sold in San Francisco were distributed by three firms in early 1957.

Price spreads between farm and price to retailer levels have tended to narrow and there seems to be substantial concentration at wholesale buying levels in most cities. It seems as though there would be an association between size of operation, costs and spreads. Generally, the larger size operations tend to be able to realize lower costs per dozen than most small size operations. These lower costs have probably been major factors contributing to narrowed spreads.

### Proximity to Supply Area and Price Spreads

Farm-to-retailer spreads tend to be smallest in market areas, such as Los Angeles, where most of the eggs are received direct from nearby areas. New York is a good example illustrating the relationship of proximity to supply area and price spreads. Farm-to-retailer spreads for eggs marketed in New York were less for eggs from Nearby farms than from Midwestern producing areas. The spreads for Midwestern eggs in New York were wider than comparable spreads in any of the other cities studied, but for Nearby eggs sold in New York they were narrower than in any of the other cities except Los Angeles.

The wider farm-to-retailer price spread for Midwestern eggs at New York is due primarily to the larger assembling, transporting, and handling costs. Historically, grade loss on these eggs was also greater. However, the improved quality of eggs shipped year-round by some progressive Midwestern firms compares favorably with eggs shipped by competing firms from other areas. It is largely because of this fact that the area discrimination notation was deleted from the New York Spot Quotation.

#### Interregional Competition

The rise of the South as a major commercial egg-producing area has had substantial impact on some major market areas. Georgia and North Carolina, for example, were once deficit egg-producing States, but they are now exporting sizable quantities of eggs to northern markets, and these eggs must compete with eggs produced in Nearby areas as well as those received from other distant areas such as the Midwest. Southern eggs compete on both quality and price, and receipts of these eggs in major cities of the Northeast have become increasingly important especially in the last 5 years - they accounted for roughly 30 percent of the eggs received in New York City in 1962, but less than 1 percent in 1958. This has intensified the interregional competition between Northeastern, Midwestern, and Southern commercial egg handlers, and may be a major factor contributing to narrowed differentials from base quotations that are used as bases for pricing eggs.

## Summary and Conclusions

The farm-retail spread and its components are defined by USDA as the differences between prices at two different market levels of operations.

Although publication of farm-retail margins data by USDA began in 1935, work on egg and poultry price spreads for various market levels in specific cities did not get started until 1955.

Prices and price spreads for 4 market levels in 10 cities have been reported since 1959. Seattle was added as the 11th city in 1962, and a 12th city, Denver, is being added as of January 1964. The four market levels are: Retail selling price, retail buying price (or price to retailer), city receiver price and the price at farms.

Price spreads vary between cities. Farm-to-retail spreads on large eggs of Grade A or better quality in 1963 averaged 23.7 cents a dozen for 10 major cities. These spreads ranged from 14.9 cents in Los Angeles to 33.3 cents for Midwestern eggs sold in New York. Farm-to-retailer spreads tend to be smallest in cities where most of the eggs are received from nearby areas.

In Cleveland, farm-to-retail spreads on eggs have narrowed somewhat since 1957, because of lowered farm-to-retailer spreads. Retail store spreads have tended to widen in some cities, including Cleveland, Chicago and New York.

Nearness to supply area and direct marketing systems tend to be associated with relatively low farm-to-retailer price spreads. Buyer markets for eggs at the city receiver level in at least some major markets may be classified as at least moderately concentrated.

The rise of the South as a major commercial egg producing area has contributed to intensified interregional competition for markets. This source of competition may be a major factor influencing reduced differentials for the New York Spot Quotations that are used as bases for price determination.

Table 1.--Prices and price spreads for eggs, frying chickens and turkeys, averages for selected U.S. Cities, 1956-63

	Prices				Price spreads				
Commodity :	-	То	City	Farm	Farm	Retail		Farm-retail	
and ;	Retail	retailers	receiver	value	retail	store	Total	: Receiver- : retailer	: Farm :receiver
Large eggs 1/ 1956 1957 1958 1959 1960 1961 1962 1963	58.8 61.8 55.0 59.4 58.8 55.5 56.1	54.4 50.5 52.5 44.9 50.2 49.0 45.2 45.9	43.5 40.7 43.1 35.5 41.3 40.0	37.4 35.7 37.8 30.5 36.0 34.8 31.3 32.4	24.7 23.1 24.0 24.5 23.4 24.0 24.2 23.7	7.7 8.3 9.3 10.1 9.2 9.8 10.3	17.0 14.8 14.7 14.4 14.2 14.2 13.9	10.9 9.8 9.4 9.4 8.9 9.0	6.1 5.0 5.3 5.0 5.3 5.2
Frying chickens: 2/ 1956	: 50.6 : 47.3 : 46.1 : 41.2 : 42.3 : 38.3 : 40.5	37.3 35.4 34.3 30.8 32.5 28.4 30.3 29.0	32.8  31.3  29.4 25.3 	26.9 26.2 25.5 22.1 23.4 19.2 21.3 20.2	23.7 21.1 20.6 19.1 18.9 19.1 19.2	13.3 11.9 11.8 10.4 9.8 9.9 10.2 10.9	10.4 9.2 8.8 8.7 9.1 9.2 9.0 8.8	4.5  3.0  3.1 3.1	5.8  6.0 6.1
Medium turkeys 3/ 1956 1957 1958 1959 1960 1961 1962	55.8 49.7 52.6 50.7 54.0 44.5 47.3	46.2 43.1 42.6 44.8 45.5 34.4 39.6 39.6	43.4 40.5 39.5 41.7 42.9 31.8 36.9 37.0	33.8 31.4 30.8 34.4 36.2 22.1 29.6 29.7	22.0 18.3 21.8 16.3 17.8 22.4 17.7 18.3	9.6 6.6 10.0 5.9 8.5 10.1 17.7 8.4	12.4 11.7 11.8 10.4 9.3 12.3 10.0 9.9	2.8 2.6 3.1 3.1 2.6 2.6 2.7 2.6	9.6 9.1 8.7 7.3 6.7 9.7 7.3

<sup>1/</sup> Eggs: Data are averages for 6 cities in 1956 - Atlanta, Baltimore, Chicago, Cleveland, New York, and San Francisco. In 1957, Boston, Los Angeles, and St. Louis were added, and in 1959. Washington. D. C. was added.

<sup>1959,</sup> Washington, D. C. was added.

2/ Frying chickens: Data are averages for 5 cities in 1956 - Atlanta, Chicago, Los Angeles,
New York, and San Francisco. In 1957, Boston, Baltimore, Cleveland, and St. Louis were added,
and in 1959, Washington, D. C. was added.

<sup>3/</sup> Turkeys: Data are averages for 5 cities - Boston, Chicago, Los Angeles, New York, and St. Louis.

Table 2.—Large eggs, Grade A or better: Major price spreads per dozen in selected cities, 1957-63

Price spread and year	Cleveland	Chicago	Nearby	New York Midwest	Average	Los Angeles
Farm-to-retail:	Cents	Cents	Cents	Cents	Cents	Cents
1957	27.0 27.4 27.1 26.6 27.3 26.6	25.6 25.6 25.1 23.7 26.1 26.4	23.6 22.5 22.3 22.7 23.7 26.2	34.8 35.2 35.6 33.1 34.5 35.0	29.2 28.8 29.6 28.4 30.1 30.6	16.8 18.0 20.2 16.0 16.2 14.6
1963	26.6 :	2 <b>5.</b> 2	2 <b>5.</b> 9	33.3	28.5	14.9
1957 1958 1959 1960 1961 1962	9.0 9.7 8.8 9.6 8.9	5.3 5.8 5.7 4.5 6.8 7.0 6.2			11.2 12.2 12.9 12.8 13.9 15.0	9.3 10.7 12.1 9.6 9.8 8.7 9.0
Farm-to-retailer: 1957 1958 1959 1960 1961 1962 1963	19.0 18.4 17.4 17.8 17.7	20.3 19.8 19.4 19.2 19.3 19.4 19.0	12.4 10.3 9.4 9.9 9.8 11.2 10.4	23.6 23.0 22.7 20.3 20.6 20.0 17.8	18.0 16.6 16.7 15.6 16.2 15.6 13.0	7.5 7.3 8.1 6.4 6.4 5.9 5.9

Table 3.--Large eggs, Grade A or better components of the farm-to-retailer spreads per dozen in selected cities, 1957-63

Price spread		:	•	New York	Los Angeles	
and year	Cleveland	: Chicago	Nearby	Midwest	Average	:
City receiver:	Cents	Cents	Cents	Cents	Cents	Cents
retailer spread:					,	
1957		11.9	9.9	13.0	11.4	5.2
1958	·	12.4	9.7	12.3	11.0	4.7 4.5
1959		11.9	9.1 7.2	12 <b>.5</b> 10 <b>.</b> 2	11.0 8.8	3.5
1960 1961	•	13.0 12.8	7.4	9.8	8.7	4.0
1962		13.0	7.7	10.1	8.9	4.3
1963		12.6	7.2	8.8	7.7	4.4
	1					
Farm-city :						
receiver spread:	1 0	8.4	2.5	10.6	6.6	2.3
19 <b>57</b> 19 <b>5</b> 8	, I	7.4	.6	10.7	5.6	2.6
1959	1 2	7.5	•3	10.2	5.7	3.6
1960		6.2	2.7	10.1	6.8	2.9
1961	•	6.5	2.4	10.8	7.5	2.4
1962		6.4	3.5	9.9	6.7	1.6
1963	8.4	6.4	3.2	9.0	5.3	1.5





